



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

JOHN ELIAS BALDACCI

DAVID P. LITTELL

COMMISSIONER

GOVERNOR

TO: Board of Environmental Protection

FROM: Mark Hyland, Director, Bureau of Remediation and Waste Management, Augusta

SUBJECT: Boralex Ashland LP Appeal of Wood Ash Utilization Program License (#S-021177-SE-G-M) issued to Boralex Ashland LP

DATE: November 19, 2009

Statutory and Regulatory References:

- *Maine Hazardous Waste, Septage and Solid Waste Management Act*, 38 M.R.S.A. §§ 1301 to 1319-Y, establishes statutory authority and licensing criteria for land application of wood ash.
- *Solid Waste Management Rules: Agronomic Utilization of Residuals*, 06-096 CMR 419 (last amended December 19, 1999), established the licensing criteria and operational procedures for land application of wood ash under which this license was processed.
- *Solid Waste Management Rules: Water Quality Monitoring, Leachate Monitoring and Waste Characterization*, 06-096 CMR 405 (last amended June 16, 2006), established standards and/or analytical requirements for site investigation; ground and surface water quality monitoring; leachate, leak detection, and leachate residue monitoring; and waste characterization programs for solid wastes.
- *Solid Waste Management Rules: Beneficial Use of Solid Wastes*, 06-096 CMR 418 (last amended June 16, 2006), established general standards, licensing procedures and screening standards for the beneficial use of secondary materials.
- Procedures for appeals before the Board are outlined in the Department's *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(24)(B).

Location: Boralex Ashland LP (Boralex Ashland) facility, located off the Realty Road in Ashland, Maine.

Description: On June 24, 2009, the Department issued Order #S-021177-SE-G-M which approved, with conditions, the request by Boralex Ashland to modify its wood ash utilization program license. Condition #3 requires the licensee to perform one-time background soil sampling for manganese prior to using any site for the land application of wood ash exceeding the (2,250 mg/kg) screening standard in 06-096 CMR 418, Appendix A for manganese.

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Condition #3 also requires that the cumulative soil concentration increase (SI) shall be estimated in accordance with the calculations in 06-096 CMR 419, Appendix A(2)(C) and use of the site shall be limited such that the combined total of the SI plus the soil background concentration does not exceed the (2,250 mg/kg) screening standard in 06-096 CMR 418, Appendix A for Mn.

Condition #4 requires that the useful life of the site shall be limited such that should the level of Mn increase, site life is adjusted downward to ensure that the SI plus the soil background concentration does not exceed the (2,250 mg/kg) screening standard in 06-096 CMR 418, Appendix A for Mn.

On July 29, 2009, Boralex Ashland submitted an appeal of the Commissioner's license approval. The appeal included several exhibits that were not part of the Department's file when the Department issued its decision on the application on June 24, 2009. The appellant is appealing the Department's decision, requesting that the Board vacate Special Conditions #3 and #4 from Department Order #S-021177-SE-G-M.

The Department staff respectively wishes to inform the Board that the *Timeline of Licensing Proceedings* has been included in the Appeal Order to help provide an accounting for the unusual extended processing time in issuing Department Order #S-021177-SE-G-M.

Environmental Issues: Handling wood ash and other liming agents in violation of 06-096 CMR 419 can result in human health, environmental and nuisance impacts from nutrients, metals, hazardous substances, and soil chemical imbalances. The United States Department of Health and Human Services reports that exposure to high levels of Mn can cause human health effects such as manganism—a disease that occurs because too much manganese injures a part of the brain that helps control body movements. Symptoms most commonly observed in occupational workers include difficulty in motor skills such as holding one's hand steady, performing fast hand movements, and maintaining balance. Mn has been identified by the United States Environmental Protection Agency as a contaminant of potential concern and that in animals high levels of Mn may produce neurotoxic responses such as hypoactivity, nervousness, tremors, and ataxia. Other reported effects include liver damage and decreased growth.

The appellant asserts that the Department: has not established an appropriate risk-based standard for Mn and is attempting to use the screening standard in 06-096 CMR 418, Appendix A for Mn to regulate the agronomic utilization of residuals containing Mn; is attempting to change regulation by establishing a new policy and regulating metals (specifically Mn) in wood ash under 06-096 CMR 418; and, is imposing an increased burden on wood ash generators without justification, with no evidence that the current ash utilization program is unsafe, and at a great cost to Boralex Ashland.

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Department Recommendation: Dismiss the appeal, and affirm Department Order #S-021177-SE-G-M.

Contact and/or presenter: Carla Hopkins and Jason Duncan, Bureau of Remediation and Waste Management

Estimated Time of Presentation: 2 hours.